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ABSTRACT

Using concepts of "dialogical highlighting dynamics" and "abbreviation" developed by Lyra and colleagues (e.g., Lyra & Rossetti-Ferreira, 1995), this study investigated how early mother-infant relationships develop, particularly the changing nature of the communication dynamics and the tendency toward stability exhibited in the construction of dynamic relational outcomes. Three different moments of quasi-stability in relationship development--establishment, extension, and abbreviation--were used for analysis. The study analyzed weekly videotapes (20 minutes each) of two middle-class Brazilian mother-infant dyads with male babies in a laboratory setting similar to a living room. For dyad 1 the analysis covered the period from 11 to 29 weeks of baby's age. For dyad 2, the analysis covered from 8 to 29 weeks of baby's age. Mothers were asked to play with their babies as they did at home. Two kinds of mother-infant exchanges were analyzed: face-to-face and mother-object-infant. Findings showed similarities and differences between the behavior of the two dyads. Similarities included the following: (1) a dominance of extension was followed by a dominance of abbreviation; (2) the dominance of extension was preceded by short moments of establishment; and (3) periods of quasi-stability were preceded and followed by periods of instability or change. Differences include: (1) change from extension to abbreviation emerged earlier in face-to-face exchanges than in mother-object-infant exchanges; and (2) the change-over the extension to the abbreaviation in dyad 1 is different from the one observed in dyad 2. (EV)

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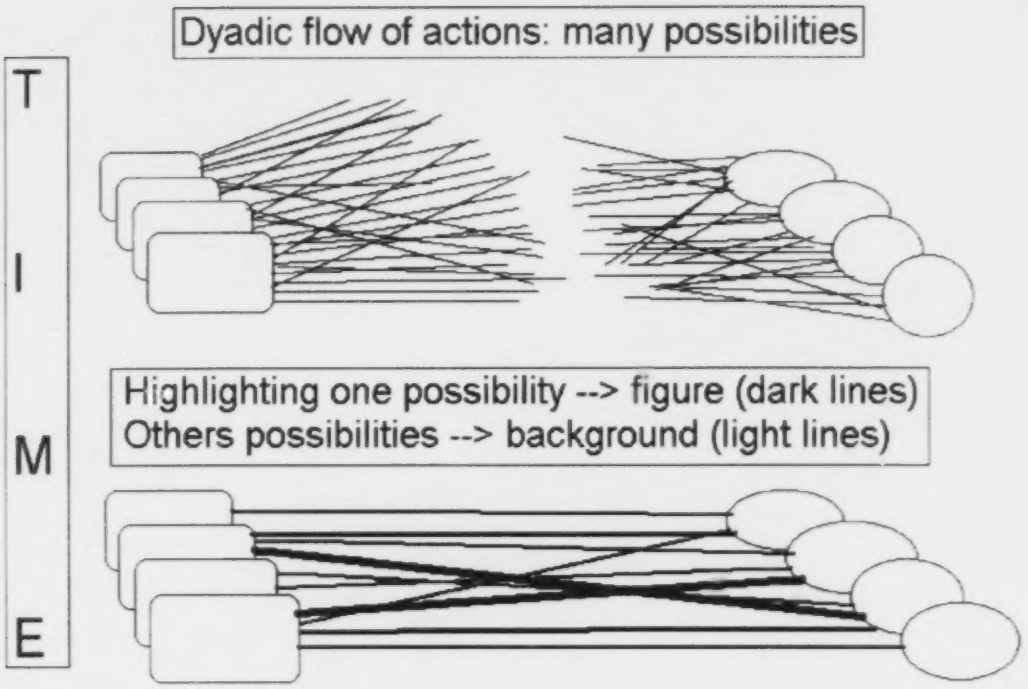
INTRODUCTION

The understanding of the human development within the dynamics of communication embedded in a cultural environment has been frequently recognized in the recent literature (Fogel, 1993; Rogoff, 1990; Rogoff, 1995; Valsiner, 1987; Valsiner, 1994).

Making use of Lyra and collegues' concepts (e.g., Lyra & Rossetti-Ferreira, 1995) of D*ialogical Highlighting Dynamics*, and *Abbreviation* this work aims to help understanding how the early mother-infant relationships develop.

A fundamental characteristic of the concepts of Dialogical Highlighting Dynamics and Abbreviation is their relational nature (Lyra & Winegar, 1997; Lyra, in press). These concepts allow us to analyze the changing nature of the communication dynamics and the tendency towards stability exhibited in the construction of dynamic relational outcomes.

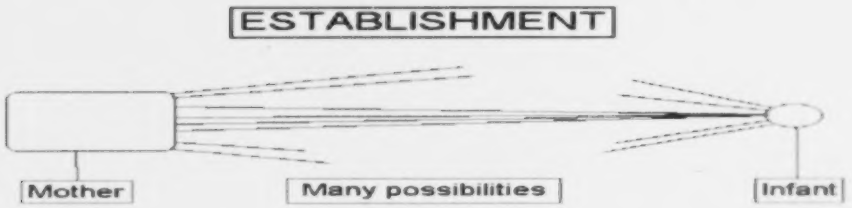
The Dialogical Highliting Dynamics concept can be defined as a dyadic highlighting of some elements within the flow of partners' actions, in a relational figure- background movement. From the understanding of this concept we can analyse the partners' dynamic exchange of action towards the construction of shared dyadic outcomes. Considering this point of view, when one or more than one aspects of the partners' flow of actions is highlighted, they acquire a greater possibility of being established, becoming a shared relational outcome in the dyadic relationship. See figure 1 below.

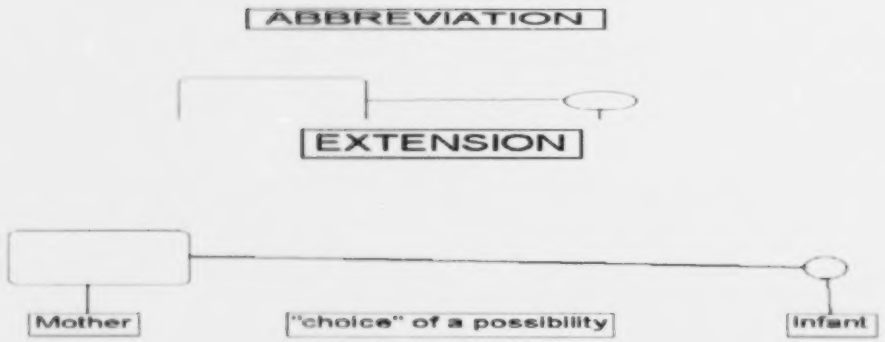


According to Lyra and Rossetti-Ferreira (1995) and Lyra and Winnegar (1997) conception, we can take notice of three different moments of quasi-stability in the history of relationship devepment: Establishment, Extension and Abbreviation, in both "Face-to-Face" and "Mother-Object-Infant" kinds of exchange. The first kind of exchange concerns the direct interaction of infants and their mothers which is characterized by the eye contact. The "Mother-Object-Infant" exchange includes objects in their communicative context.

Within the dynamics of Establishment moment, there is a movement of mutual adjustment of partners towards establishing at least one element of exchange, through sucessive or concomitant actions of highlighting. Once established, those relational actions become a background and the Establishment changesover a period of Extention during which the dyad will be able to highlight other actions as figures. Simultaneous movements

towards reducing the duration of exchange can be observed and characterize the Abbreviation moment. The abbreviated negociations are immediately established, during short periods of time, in a smooth and mutual adjusted way. See figure 2 below.





METODOLOGY

Weekly videotape records (20 minutes each) of two middle-class Brazilian dyads (male babies) in a laboratory setting, similar to a living room (chairs, carpet and toys) were analysed. The mothers were asked to play with their babies as they used to do at home.

The dyads analysed covered the period from eleven to twenty nine weeks of baby's age - dyad 1 - and from eight to twenty nine weeks of baby's age - dyad 2.

Two kinds of mother-infant exchanges were analysed: "face-to-face" and "mother-object-infant" exchanges. The last one focused on the construction of giving and taking object game. This game is characterized as involving a visually guieded reaching movement from the baby towards the object offered by the mother.

RESULTS AND DISCUSSION

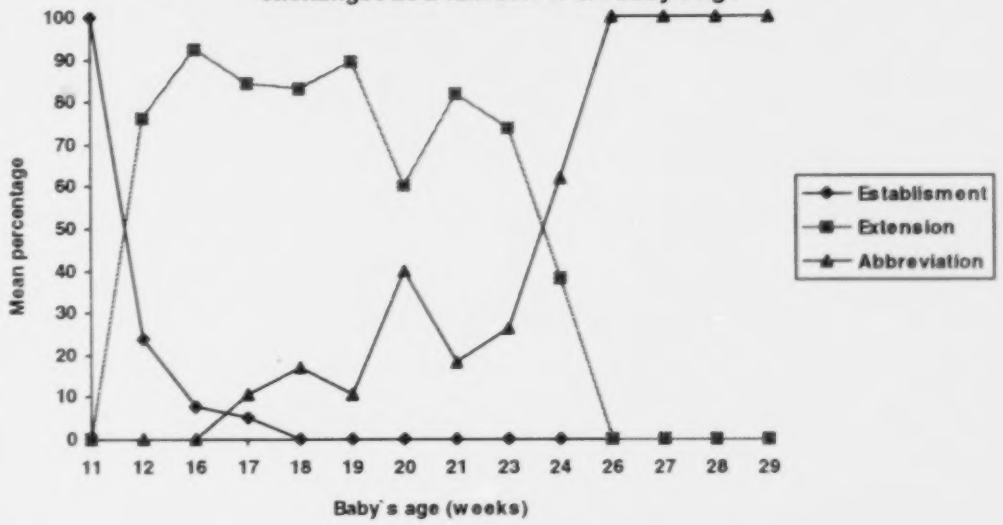
The mean percentage of time spent in "face-to-face" and "mother-object-infant" dyadic exchanges as a function of the baby's age, to the dyad 1, can be depicted in figures 3 and 4 below.

Figure 1

Dyad 1 - Mean percentage of time spent in face-to-face dyadic exchanges as a function of the baby's age

Figure 2

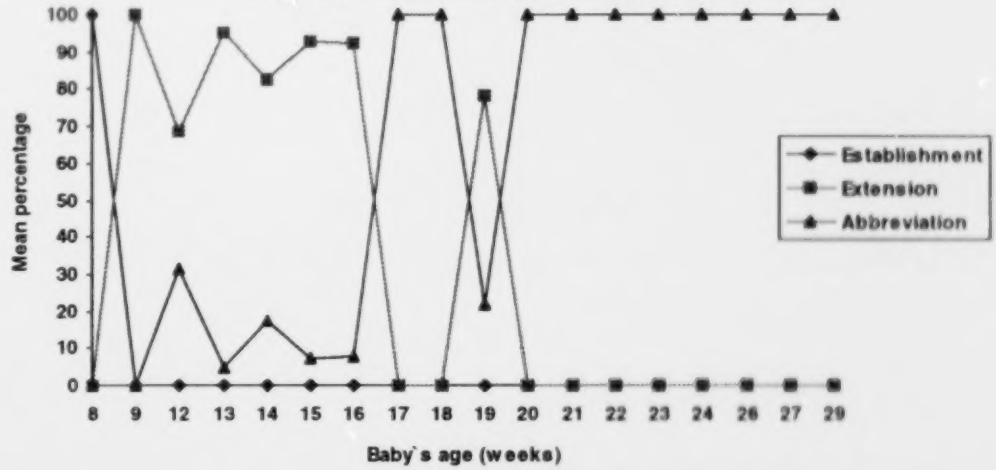
Dyad 1 - Mean percentage of time spent in mother-object-infant dyadic exchanges as a function of the baby's age

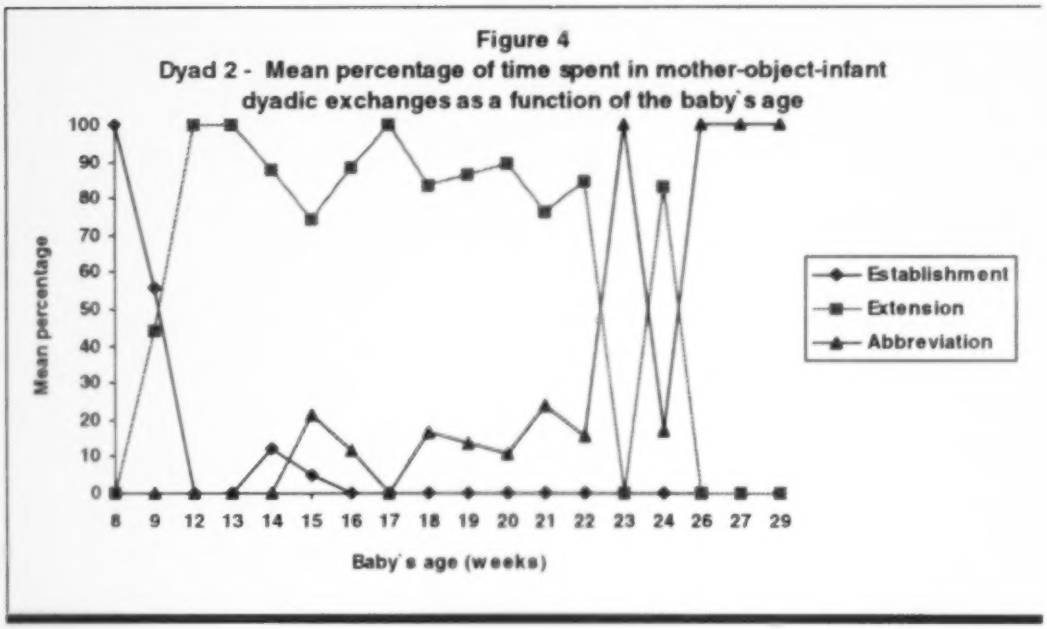


The mean percentage of time spent in "face-to-face" and "mother-object-infant" dyadic exchanges as a function of the baby's age, to the dyad 2, can be depicted through the figures 5 and 6 below.

Figure 3

Dyad 2 - Mean percentage of time spent in face-to-face dyadic exchanges as a function of the baby's age





DISCUSSION

(1) Stability and Change

The data analysed exhibit both similaties and idiosyncrasies which refer to (a) the comparison between "face-to-face" and "mother-object-infant" dyadics exchanges (b) the comparison between the two dyads.

1.1. Similarities

The two dyads examined in both "face-to-face" and "mother-object-infant" exchanges, exhibit the following aspects:

(a) A dominance of Extension followed by a dominance of Abbreviation;

(b) The dominance of Extention seems to be preceded by short moments of Establishment.

(c) The periods conceived as describing moments of quasi-stability (Establishment, Extension and Abreviation) are preceded and followed by periods of instability or change.

1.2. Differences

(a)- "Face-to-face" exchanges versus "mother-object-infant" exchanges

Considering both "face-to-face" and "mother-object-infant" exchanges, (figure 1 versus 2 and figure 3 versus 4), we can observe in both dyads, that during baby's life, the change-over the Extension to the Abbreviation emerges earlier in the "face-to-face" exchange than in the "mother-object-infant" one.

(b).- Dyad 1 versus Dyad 2

Regarding both dyads' quasi-stability period and change (figure 1+2 versus figure 3+4) we can see that the change-over the Extension to the Abbreviation in dyad 1 is different from the one observed in dyad 2. This occurs in both exchanges analysed - "face-to-face" and "mother-object-infant".

While in the dyad 1, this change is noticed as clear-cut, i.e., the dominance of Abbreviation emerges immediately after the end of the Extension, in the dyad 2, there's a moment of change instability between the end of the Extention and the beginning of the Abbreviation swap until we can identify a dominance of Abbreviation.

The differences observed in both dyads we mentioned above, highlight the idiocyncrasies concerned to each one of them, even though the dyads exhibit similar moments of quasi-stability - Establishment, Extention and Abbreviation – in both kinds of exchange analysed.

We sugest that the development of idiosyncrasies reflects the concequences of particular actions of highlighting through the specific history of each dyad.

(2) The dynamics of highlighting

Dyad 1

The dyad 1 tends to use a kind of highlighting dynamics which shows a greater mutual participation of both partners so that the movement of figure-background seems to occur in a balanced and smooth way. In the Abbreviation, in both kinds of exchangs, this dyad seems to include a greater spectrum of negotiated elements.

We propose that this particular dialogical highlighting dynamics provides the use of a greater number of shared elements. Moreover, this dyad exhibt a process of change from Extention to Abbreviation in a clear-cut way. In other words, the lack of instability in such a change, can be due to this balanced and smooth way of partner's exchanges.

The following examples show the Abbreviated periods of the dyad 1 which exhibit a greater amount of negotiated elements (*smiles, vocalizations, body movements, bouncing and making noise with the toy)* and a mutual participation of both partners' in a balanced and smooth way.

- "Face-to-Face" (24 weeks)

Baby lays down in a supine position

Mother *leans toward the baby's face, talking and smiling*

Eye contact is immediately established

Baby *smiles, vocalizes* and extend his arms towards the mother

Both partners gaze away.

- "Mother-Object-Infant" (28 weeks)

Mother brings toy close to the baby, *bouncing* it and *making noise* with it

Baby looks at the toy held by the mother and *extends his arms* towards the toy

Mother *moves the object* even closer to the baby

When the baby *grasps* the toy held by the mother, the mother releases it.

Dyad 2

The dyad 2 favors a type of highlighting dynamics which frequently changes in an abrupt way from one figure to another.The highlighting dynamics is more "directed" by the mother. We can see that the dyad takes less time on the exchanging construction of different elements. "Face-to-face" and "mother-object-infant" exchanges seem to be abbreviated in a more repetitive way (i.e., less amount of negociated elements – *make noise with the mouth, body moviments*) and are frequently led by the baby.

This aspect indicates that a less amount of elements are negotiated by the dyad along the Abbreviation construction and thus, it happens more repetitively. The baby who takes control of the repetitive Abbreviations seems to lead the Abbreviated exchanges.

This aspect can be ilustrated by the following examples:

- "Face-to-Face" (24 weeks)
Mother *makes noises with her mouth*
Eye contact between the mother and her baby is immediately established
Baby gazes away.

- "Mother-Object-Infant" (26 weeks)
Baby *looks* at a toy next to him
Mother *holds the toy* within the baby's reach
Baby *grasps the toy* held by the mother.

CONCLUSION - SUMMARY

The conception of three moments – Establisment, Extention and Abbreviation – as describing the early development of communicative dyad exchangs helps to understand the dynamic mature of this development through the identification of moments of quasi-stability and change.

The description of the partners' exchanges as dialogical highlighting dynamics works as figures against a back-ground in order to criate meaning points toward a methodological approach for grasping the particular histories of each dyad exchanges and constructions.

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